



BUSINESS PLAN

CEN/TC 165

Wastewater engineering

Doc CEN/TC 165 **N 3147**
(replaces N 2270)

EXECUTIVE SUMMARY

Business environment

- The controlled discharge and cleaning of wastewater is an essential aspect of protection of people's health and the surrounding environment. EN drafted by consent are essential to guide investments in wastewater infrastructure consisting of wastewater collection systems and wastewater treatment. These European Standards support the secure meeting of essential aspects for public health, health and safety of people and animals, environmental protection and sustainability.
- Application sectors are design, construction, operation, maintenance and rehabilitation of wastewater collection systems as well as the treatment of wastewater and use **of treated wastewater**.
- Parties involved:
 - public authorities,
 - manufacturers of products for wastewater applications,
 - operators of wastewater discharge and treatment systems,
 - test laboratories,
 - planning and construction companies.

Benefits

European Standards of CEN/TC 165 are used to perform the desired level of commercial interoperability in Europe, considering its very significant position in the international market.

Since 1990, more than 110 standards were adopted which give confidence to costumers in respect of security, quality, health and safety, environmental protection and sustainability in the field of wastewater engineering. The need of common European Standards is given by reinforcing the European internal market by removing technical barriers to trade which impact considerably the free trade within the enlarged European Union.

Priorities

To make European standards available related to:

- the performance and installation of systems and components for wastewater application,
- products for wastewater collection and treatment systems (e.g. pipesystems, separators, small wastewater treatment plants, etc.),
- design, calculation, construction, commissioning, operation and maintenance in the field of wastewater engineering from the point of view of origin (with the exception of the product standards for sanitary appliances) up to the point of disposal, including treatment plants,

- the use of treated wastewater which include CEN deliverables for principles of design, construction, installation, operation and maintenance for on site use of treated wastewater including rainwater and greywater and standards (performance, test methods, structural behaviour, guide for installation) for different products, e.g. tanks, filters, control equipment, treatment units as well as infiltration units in cases where no specific material related TC exists.

1 BUSINESS ENVIRONMENT OF THE CEN/TC

1.1 Description of the Business Environment

The following political, economic, technical, regulatory, legal, societal and/or international dynamics describe the business environment of the industry sector, products, materials, disciplines or practices related to the scope of this CEN/TC, and they may significantly influence how the relevant standards development processes are conducted and the content of the resulting standards.

CEN/TC 165 is within its agreed scope responsible for drafting of functional standards, standards for performance and installation in the field of wastewater engineering for systems and components. Where there is no existing material related TC, CEN/TC 165 is also responsible for drafting product standards for all components of discharge pipes, drain and sewer pipes, pipelines, separators etc. according to the resolutions of BT (for the organization of work in the field of metallic tubes see resolution BT 160/1989). CEN/TC 165 establishes standards for design, calculation, construction, commissioning, operation, maintenance and rehabilitation in the field of wastewater engineering, from the point of origin (with the exception of the product standards for sanitary appliances¹ up to the point of disposal, including treatment plants.

With increasing requirements of the various authorities of the EU but also of national bodies to the protection of people's health and the surrounding environment wastewater engineering gains an increasing importance. There is an increasing demand for European Standards drafted by consent that are supporting the secure meeting of the environmental requirements.

Standards drafted in CEN/TC 165 mainly belong to the so-called horizontal standards. They specify general requirements to sewers and drains, products for the wastewater engineering, the design, laying and structural design of sewers and wastewater treatment plants. They are used in design, calculation and performance of processing and plant engineering as well as in construction, operation and maintenance of wastewater plants. For communicative purposes standards to terms and definitions are elaborated (see EN 16323). Standards drafted in CEN/TC 165 include the whole field of wastewater engineering from the point where the wastewater arises, including surface water run-off, to the discharge into rivers or lakes.

For products for which in material related TCs standards are drafted, such as CEN/TC 155 "Plastic piping systems" and CEN/TC 203 "Cast iron pipes", the product standards also have to meet the standards of TC 165 for general requirements from which an important element of the market situation of TC 165 has an effect on other TCs and affects them directly.

Therefore a multitude of standards of TC 165 was given a mandate on the basis of the Council Directive 93/38/EEC of 14 June 1993 coordinating the procurement procedures of entities operating in the water, energy, transport and telecommunications sectors, now replaced by Directive 2014/25/EU of the European Parliament and of the Council of 26 February 2014 on procurement by entities operating in the water, energy, transport and postal services sectors.

¹ flushing cisterns, urinals, kitchen sinks, basins, bidets, baths, (including whirlpool baths) and shower trays, see TC 163 Resolution 2 (London), WG 3 and 4

Products such as vitrified clay pipes and manholes, pipes and manholes made from concrete, steel pipes, gullies, manhole covers and gratings, separators, and small and large wastewater treatment plants are used everywhere in Europe in wastewater collection and treatment systems. They are in the scope of the Construction Products Directive (EU-Directive 89/106/EEC) (replaced by the Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011 laying down harmonised conditions for the marketing of construction products (CPR)).

That is why for these products harmonized standards (hEN) were drafted and others are still under preparation or revision to bring them in line with the new provisions of the CPR. They have to fulfil the given essential requirements of the mandate M/118 "Wastewater Engineering Products" and of the Mandate M/131 for "Pipes, tanks and ancillaries not in contact with water for human consumption". Harmonized standards according to the Regulation No 305/2011/EC are the prerequisite for the CE-Marking of these products and thus the basis for the free circulation on the European market.

1.2 Quantitative Indicators of the Business Environment

The economic value of the standards drafted in CEN/TC 165 is considerable but as a rule cannot be expressed directly as a quantity. It is, however, obvious that all durable plants (wastewater treatment plants, sewers) can be constructed and operated in a more economic way by using standardized construction products and methods of construction if the used standards demand a high level with respect to quality. Herewith besides the reduction in endangering man, animal and environment also a safe operation of the plants is ensured in the long-term. European standards for wastewater services generate substantial benefits for public health, the economy, the environment and sustainability.

2 BENEFITS EXPECTED FROM THE WORK OF THE CEN/TC

Standardization work of CEN/TC 165 in the field of wastewater engineering support the implementation of the following EU-Directives:

- Directive 2014/25/EU of the European Parliament and of the Council of 26 February 2014 on procurement by entities operating in the water, energy, transport and postal services sectors;
- COUNCIL DIRECTIVE of 21 May 1991 concerning urban wastewater treatment (91/271/EEC);
- The Water Framework Directive (2000/60/EC) of 23 October 2000 concerning water resources management;
- EU Floods Directive (2007/60/EC);
- Construction Products Regulation No. 305/2011/EC.

By the use of standards in the field of wastewater engineering, the state of the art between those who construct wastewater systems, components and treatment plants and the operators and the compliance with European Directives or Regulations is ensured. Between designers on the one hand and suppliers on the other hand the security of the contract is increased by referring to standardized requirements to the quality of the products which are as a rule secured by standardized test methods and standardized procedures for the assessment of quality.

By use of the European Standards the access of products on the market is made easier, and this at last leads to a better acceptance of these products in the EU-countries and world-wide.

The very rationalising and thus cost saving effect of product standards in the field of wastewater engineering, e. g. by standardization of dimensions, use of pre-fabricated parts, security of a high quality and by standardized clarification procedures becomes noticeable in a long durability of the

products and in lower production costs as well as in a decrease of costs in operation and maintenance.

3 PARTICIPATION IN THE CEN/TC

All the CEN national members are entitled to nominate delegates to CEN Technical Committees and experts to Working Groups, ensuring a balance of all interested parties. Participation as observers of recognized European or international organizations is also possible under certain conditions.

Especially representatives of the operators (users), the manufacturers, design engineers and other consulting engineers, public institutions and test laboratories belong to the interested parties of CEN/TC 165.

Due to the structure of the CEN/TC 165, participants in plenary meetings consist of 3 delegates each of the national standards bodies, the convenors of the working groups, representatives of the Liaison partners and close European associations, such as the EWA.

Responsible for drafting European Standards in their scope are Working groups, which are composed in the right balance between different interests like manufacturers, users, testing laboratories a.s.o. Most of the secretariats are held by National Standardization Bodies.

To participate in the activities of CEN/TC 165, please contact the national standards organization in your country.

Co-operation

Liaisons with the following committees have been established:

CEN/TC 155, CEN/TC 164, CEN/TC 197, CEN/TC 203, CEN/TC 208, CEN/TC 229, CEN/TC 308

Most of them are actively participating in the work of CEN/TC 165. Other liaisons are working by exchanging documents.

External liaisons have been established with the European Water Association (EWA), Aqua Europa (AE), the European General Galvanizers Association (EGGA) and European Plastic Pipes and Fittings Association (TEPPFA).

4 OBJECTIVES OF THE CEN/TC AND STRATEGIES FOR THEIR ACHIEVEMENT

4.1 Defined objectives of the CEN/TC

The objectives of the TC are:

- to elaborate standards within the scope of the TC including standards for terminology and test methods,
- to adjust the work programme to the market needs,
- to adjust the work programme for the elaboration of standards according to mandates given by the EC.

The objectives will:

- contribute to eliminate trade barriers,
- give orientation to manufacturers, purchasers, public tenders, planning officers,
- give orientation on how to meet legislation requirements in relation to areas of growing interest such as safety, health and environmental protections.

4.2 Identified strategies to achieve the CEN/TCs defined objectives

TC 165 has already elaborated a large number of European Standards under the Public Procurement Directive. These are standards for terminology, general requirements for components used in discharge pipes, drain and sewer systems inside and outside buildings and wastewater treatment plants. Many of them are already published.

The next important steps will be to continue the elaboration

- of European Standards for repair, renovation and replacement of drains and sewers,
- the adoption of harmonised European Standards to the Construction Products Regulation (CPR),
- standards for use of treated wastewater,
- consideration of environmental aspects.

4.3 Environmental aspects

TC 165 published CEN/TR 16928 “*Guidance for the implementation of environmental aspects in product standards and system standards in the field of wastewater engineering*” in 2016.

This document applies for the implementation of environmental aspects in product standards and system standards in the field of wastewater engineering. It provides a structure on how to identify and consider environmental aspects and potential environmental impacts of products and systems in the field of wastewater engineering throughout their life cycle.

This Technical Report gives guidance on how this life cycle should be considered in accordance with EN 15804.

Up till now the progressive climate change is not in the focus of most of the existing European standards of TC 165. In May 2018 the EC proposed new rules to stimulate water re-use because water is finite and too precious to waste. The UN Sustainable Development Goal on Water (SDG 6) specifically targets a substantial increase in recycling and safe reuse globally by 2030 because ongoing lavish use of water will lead to water scarcity even in rather wet countries. Any water reuse measures have to watch the possible effects on the environment and the technologies must be positively assessed concerning their future use for irrigation, aquifer recharge or communal, private or industrial use. The objectives of Europe are well defined and declared at <http://ec.europa.eu/environment/water/reuse.htm> and should be in the focus of CEN/TC 165.

5 FACTORS AFFECTING COMPLETION AND IMPLEMENTATION OF THE CEN/TC WORK PROGRAMME

Due to grown national rules of history and the national rules which have emerged thereof the consent for common European Standards is still very difficult. Even if the experts involved in the work of the WG agree, often the contents of the draft standard has to be discussed again after the CEN-enquiry, and this can lead to unexpected considerable delays of the standardization work. For some projects expert resources are not sufficiently available. On this it has also to be said that the experts are working in an honorary capacity.

Very much time is needed to carry out the editorial work of the draft standards. In this case the professional support of the standardization work by the national standards bodies, run by the WG-secretariats, is to be improved.

Legal/regulatory issues such as uncertainties regarding the Construction Products Regulation 305/2011/EC, which in turn may require modifications of the content and the target dates for projects in the work programme and the necessity of the assessment of the CEN consultant could negatively impact the completion of EN.